Nonroad Diesel Technical Amendments and Tier 3 Technical Relief Provision

The U.S. Environmental Protection Agency is publishing a direct final rule to provide nonroad equipment manufactures with a production technical relief provision in the Tier 3 timeframe. EPA is also including some technical amendments to 40 CFR Parts 9, 89, and 1039 to correct a variety of regulatory provisions.

Background

This direct final rule provides nonroad diesel equipment manufacturers with a production technical relief provision for Tier 3 equipment, which is similar to the technical relief provision already available for Tier 4 equipment. The provision is for equipment manufacturers that do not make the engine used in their equipment. (For Tier 4 technical relief provisions, read the Clean Air Nonroad Diesel Rule Fact Sheet).

Tier 3 Technical Relief Provision for Nonroad Diesel Equipment

The direct final rule establishes a technical relief provision that allows manufacturers to produce equipment that uses engines not conforming to the Tier 3 standard if for every 1% of the equipment production using this relief, a percentage of production equipment flexibility allowance for Tier 4 is sacrificed from the comparable Tier 4 power category plus an additional 1% from any potential Tier 4 technical relief that the EPA might grant. The Tier 4 percent of production sacrifice is based on the percentage of earlier tier (e.g. Tier 2) engines utilized.

Because the Tier 3 and Tier 4 rules have different power category ranges, we specify the corresponding power categories as seen in Table 1. The Tier 3 power categories of 37 to 75kW and 75 to 130kW correspond to the Tier 4 power category of 56 to 130kW. The sum of all the Tier 3 units that are exempted by the technical relief divided by the sum of all the Tier 3 units sold in the corresponding Tier 4 power category will determine the percentage of Tier 4 equipments affected. The technical relief program is presented in tabular form in Table 2.



Table 1. Power Categories		
Tier 3 Power Category	Tier 4 Power Category	
37kW to 75kW*	19kW to 56kW	
7kW to 75kW**, 75kW to 130kW	56kW to 130kW	

^{*} Applies only to use of engines rated between 37kW and 56kW by small volume equipment manufacturers.

^{**} Includes only equipment that uses engines with a rated power greater than 56kW.

Table 2. Technical Relief Usage			
Use of Percent of Production Allowance	Offsetting Deductions Required for Use of One Percent of Tier 3 Technical Relief		
by Equipment Manufacturer During Implementation of Tier 2 Program	Tier 4 Percent of Production Allowance	Tier 4 Technical Relief	
0 to 20%	0%	1%	
20 to 40%	1%	1%	
40 to 60%	2%	1%	

The need for technical relief must be demonstrated. The requirements for this technical relief provision are:

- Demonstrated technical need for nonvertically integrated product
- Unable to complete redesign during transition due to the fault of the engine supplier
- Full allowance is limited to the first two years of Tier 3
- Phased-in by power category with flexibility use
- Up to a maximum of an additional 50% beyond original 80%
- Without technical relief, flexibility provisions would apply seven years or until fully consumed
- Applies to 56 to 560 kW categories only for the percent of production and only available between 37 to 75 kW for the small volume
- Requires documentation of the technical or engineering problem that was unsolvable within the given lead time
- Normal design cycle between the engine manufacturer and the equipment manufacturer and why that process did not work in this instance

- All information received by the equipment manufacturer from the engine manufacturer
- Comparison of the design process for the equipment model for which the exemption is requested versus those for which the exemption is not needed
- The equipment maker would have to make and describe all efforts to find other compliant engines for the model
- EPA would decide on a case-by-case basis what additional percentage, if any, of additional relief would be provided

The technical relief for small volume equipment manufacturers is similar to the equipment manufacturer technical relief with the distinction that it applies only to small volume equipment manufacturers. The following criteria for small volume apply:

- 550 unit cap
- Small volume technical relief is only available to the 37 to 56 kW range and the 56 to 75 kW range

This provision ensures that the environmental deficit associated with this additional relief beyond the original scope of the Tier 3 program is mitigated and new technology is introduced sooner in Tier 4. It also encourages use of this program for only those situations in which it would absolutely be needed.

EPA is also making several technical amendments to correct various regulatory provisions in the regulations for nonroad diesel engines.

Public Participation Opportunities

This regulation is being released as a direct final rule because we view it as a non-controversial action and anticipate no adverse comment. However, comments can be submitted under a parallel Notice of Proposed Rulemaking. For instructions on submitting written comments, please see the Federal Register notice, which is available from the Web site below or from the EPA Air and Radiation Docket (call 202-566-1742 and refer to Docket No. EPA-HQ-OAR-2007-0652). You can access the rule and related documents from EPA's Office of Transportation and Air Quality at www.epa.gov/nonroad-diesel/regulations.htm.

For More Information

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